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09/803,818	03/12/2001	Hon Ching Yung	9661-0011	1329

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EXAMINER

DIXON, THOMAS A

ART UNIT PAPER NUMBER

3639

DATE MAILED: 05/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/803,818

Applicant(s)

YUNG ET AL.

Examiner

Thomas A. Dixon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 and 36-47 is/are pending in the application.
- 4a) Of the above claim(s) 26-35 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 37-46 is/are allowed.
- 6) ☐ Claim(s) 1-27, 36 is/are rejected.
- 7) ☒ Claim(s) 47 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Amendment and Arguments

1. The status of the claims as stated in the remarks is incorrect, the cancelled claims are 28-35, rather than 28-34 as stated. This effectively eliminates all the method claims from the application.

Claim Objections

2. Claims 15, 47 are objected to because of the following informalities:

As per Claim 15, the word "simulate" seems out of place or incomplete, simulate what? a coin mechanism sensing a coin deposit?

As per Claim 47, the phrase that the software package features "for managing database...appropriate level of management" are not supported by the specification, the specification portion cited by applicant supports a database capable of "collating the data for data analysis, route planning, inventory control, and other management purposes, but does not specifically support "creating, storing, retrieving, and storing database records, for producing inventory reports and for relaying alert message to an appropriate level of management".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claim 1-3, 6, 8-9, 11-13, 20, 32-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Martshitsch et al (6,764,003).

As per Claim 1.

Martschitsch et al ('003) discloses:

a controller device for controlling vending operations of the vending machine, see figure 1 (42);

a wireless modem device for communicating between the controller device, the wireless modem being adapted to receive via the network a short message originated from a purchaser and to communicate the short message to the controller device, column 4, lines 62-67;

whereby, upon receipt of the short message, the controller device initiates a vending operation, controls the vending operation and communicates transaction to the vending operation to a central computer, see column 5, line 37 – column 8, line 67 and see column 9, lines 42-48.

As per Claim 2.

Martschitsch et al ('003) further discloses a cpu, data and program memory, see column 4, lines 14-16.

As per Claim 3.

Martschitsch et al ('003) further discloses a transceiver and a programmable interface, see column 4, lines 14-16.

As per Claim 6, 16.

Martschitsch et al ('003) further discloses sending a short message to the central computer, see column 5, lines 37-55.

As per Claim 8, 17.

Martschitsch et al ('003) further discloses a vending circuit, see column 4, lines 40-47.

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As per Claim 9, 19.

Martschitsch et al ('003) further discloses a coin detection, see column 4, lines 47-57.

As per Claim 11, 18.

Martschitsch et al ('003) further discloses a display, see column 4, lines 44-46.

As per Claim 12.

Martschitsch et al ('003) further discloses communicating information to the wireless modem, and the wireless modem adapted to communicate transaction information to a central computer via the network, see column 5, line 37 – column 8, line 67 and see column 9, lines 42-48.

As per Claim 13.

Martschitsch et al ('003) further discloses sending a short message to the central computer, see column 5, lines 37-55 and see column 9, lines 42-48.

As per Claim 20.

Martschitsch et al ('003) further discloses a display, see column 4, lines 44-46, and a selection button, see figure 1 (46).

As per Claim 32.

Martschitsch et al ('003) discloses:
receiving a purchase request, see column 5, line 37- column 8, line 67 ;
converting the purchase request to a short message, see column 5, line 37- column 8, line 67; and
transmitting the short message to a vending machine to initiate a vending operation, see column 5, line 37- column 8, line 67.

As per Claim 33.

Martschitsch et al ('003) discloses:
sending a purchase request through a cellular phone, see column 5, line 37- column 8, line 67;
selecting merchandise from a display panel of the vending machine, see column 5, line 37- column 8, line 67; and
obtaining the selected merchandise from the vending machine, see column 5, line 37- column 8, line 67.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 4-5, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martshitsch et al (6,764,003) in view of Kolls (6,056,194).

As per Claim 4

Martschitsch et al ('003) discloses sending a dispense signal to the vending machine, but does not specifically disclose simulation, however applicant's disclosed reference Kolls ('194) column 6, lines 20-35 teaches to simulate and sends a purchase signal to a vending machine as a well known method for initiating a vending operation.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to simulate a purchase signal to a vending machine as a well known method for initiating a vending operation.

As per Claim 5.

Martschitsch et al ('003) further discloses a programmable interface, see column 4, lines 14-16.

As per Claim 15.

Martschitsch et al ('003) discloses:

- a vending machine for storing and dispensing merchandise, see figure 1 (4);

- a controller device for controlling vending operations of the vending machine, the controlling device being adapted to initiate a vending operation and transmit transaction information of the vending operation to a central computer, see figure 2 (42) and column 5, line 37 – column 8, line 67 and column 9, lines 42-48;

- a wireless modem for communicating between a network and the controller device, the wireless modem device being adapted to receive via the network a short message originated from a purchaser and to communicate the short message to the controller device, the wireless modem also being adapted to receive the transaction information from the controller device and communicate the transaction information to a central computer, see column 5, line 37 – column 8, line 67;

- a central computer for communicating with the wireless modem via the network, the central computer being adapted to receive and store the transaction information transmitted by the controller device, see figure 1 (3) and see column 9, lines 42-48;

- whereby, upon receipt of the short message originated from the purchaser, the controller device simulates and sends a purchase signal to the vending machine to thereby initiate the vending operation and sends the vending transaction information to the central computer, see column 5, line 37 – column 8, line 67.

Martschitsch et al ('003) discloses sending a dispense signal to the vending machine, but does not specifically disclose simulation, however applicant's disclosed

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reference Kolls ('194) column 6, lines 20-35 teaches to simulate and sends a purchase signal to a vending machine as a well known method for initiating a vending operation.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to simulate a purchase signal to a vending machine as a well known method for initiating a vending operation.

4. Claims 7, 10, 14, 21-22, 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martschitsch et al (6,764,003) in view Defosse (6,547,038).

As per Claim 7.

Martschitsch et al ('003) discloses a power supply which may be a battery and or solar cells, see column 4, lines 57-61, but does not specifically disclose a power circuit and a backup battery, however Defosse ('038) figure 2 teaches a power supply (68) and a battery backup (74) a backup and a hardware interface bus (67) and microprocessor (64) as a well known method for ensuring power to a vending operation.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to have a power circuit with a battery backup for the benefit of ensuring power to a vending operation

As per Claim 10.

Martschitsch et al ('003) discloses storing transactions, but does not specifically disclose an out of stock alert, however Defosse ('038) column 5, lines 14-28 for the benefit of central control of a vending operation.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to include the out of stock alert of Defosse ('038) in the invention of Martschitsch et al ('003) for the benefit of central control of a vending operation.

As per Claim 14.

Martschitsch et al ('003) discloses storing transactions, but does not specifically disclose a quantity counting, however Defosse ('038) column 6, lines 22-33 for the benefit of central control of a vending operation.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to include the quantity counting of Defosse ('038) in the invention of Martschitsch et al ('003) for the benefit of central control of a vending operation.

As per Claim 21.

Martschitsch et al ('003) discloses:
a vending machine for storing and dispensing merchandise, see figure 1 (4);
a controller device for acquiring inventory and transaction data and controlling vending operations of the vending machine, the controlling device being adapted to initiate a vending operation upon receipt of a first short message service originated from

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a purchaser, to collect transaction information about the vending operation, to transmit the transaction information and the merchandise quantity data to a central computer, see column 5, lines 14-17 and column 9, lines 42-48 and column 7, line 24 – column 8, line 44;

a wireless modem for communicating between a network and the controller device, the wireless modem being adapted to receive via a network a short message service originated from a purchaser and transmit the short message service to the controller device, the wireless modem being also adapted to communicate the transaction information and the merchandise quantity data from the controller to a central computer, see column 5, line 37- column 8, line 67;

a central computer for communicating with the wireless modem via the network, the central computer being adapted to store the transaction information and the merchandise quantity data as setting information when the vending machine when the vending machine comes on-line, see column 5, line 37- column 8, line 67.

Martschitsch et al ('003) discloses storing transactions, but does not specifically disclose a quantity counting, however Defosse ('038) column 6, lines 22-33 for the benefit of central control of a vending operation.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to include the quantity counting of Defosse ('038) in the invention of Martschitsch et al ('003) for the benefit of central control of a vending operation.

As per Claim 22.

Martschitsch et al ('003) further discloses sending a short message to the central computer, see column 5, lines 37-55.

As per Claim 26.

Martschitsch et al ('003) further discloses a coin detection, see column 4, lines 47-57, a display, see column 4, lines 44-46.

As per Claim 27.

Martschitsch et al ('003) further discloses a display, see column 4, lines 44-46 and a button, see figure 1 (46).

5. Claims 23-25, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martschitsch et al (6,764,003) in view of Defosse (6,547,038) further in view of Kolls (6,056,194).

As per Claim 23.

Martschitsch et al ('003) discloses:

receiving a short message, see column 5, line 37- column 8, line 67;

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Martschitsch et al ('003) discloses sending a dispense signal to the vending machine, but does not specifically disclose simulation, however applicant's disclosed reference Kolls ('194) column 6, lines 20-35 teaches to simulate and sends a purchase signal to a vending machine as a well known method for initiating a vending operation.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to simulate a purchase signal to a vending machine as a well known method for initiating a vending operation.

As per Claim 24.

Martschitsch et al ('003) further discloses a display, see figure 1 (45).

As per Claim 25.

Martschitsch et al ('003) further discloses a selection button, see figure 1 (46).

As per Claims 36.

Martschitsch et al ('003) discloses:

receiving a first short message originated from a purchaser, see column 5, lines 37- 45;

receiving a merchandise selection message from the purchaser, see column 6, line 5- column 8, line 67;

dispensing a selected merchandise from the vending machine, see column 5, line 37- column 8, line 67;

collecting transaction information about the vending operation, see column 9, lines 42- 48; and

transmitting the transaction information to a central computer where the transaction information is processed, see column 5, line 37- column 9, line 66.

Martschitsch et al ('003) discloses storing transactions, but does not specifically disclose a quantity counting, however Defosse ('038) column 6, lines 22-33 for the benefit of central control of a vending operation.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to include the quantity counting of Defosse ('038) in the invention of Martschitsch et al ('003) for the benefit of central control of a vending operation.

Martschitsch et al ('003) discloses sending a dispense signal to the vending machine, but does not specifically disclose coin mechanism simulation, however applicant's disclosed reference Kolls ('194) column 6, lines 20-35 teaches to simulate and sends a purchase signal to a vending machine as a well known method for initiating a vending operation.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to simulate a purchase signal to a vending machine as a well known method for initiating a vending operation.

Allowable Subject Matter

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6. Claims 37-47 are allowable.

7. As per Claim 37

The prior art of record, specifically, Martshitsch et al (6,764,003) in view of Kolls (6,056,194) further in view of Stapp (5,930,771), further in view of DeFosse (6,457,038) further in view of Etoh et al (5,963,452) does not disclose or fairly teach a system for purchasing merchandise from a vending machine through a cellular phone, comprising:

a control and communication unit means for performing inventory data acquisition, directly controlling vending events, determining alert status, storing vending transaction information, and communicating alert message and vending transaction information to a central computer;

a vending transaction information comprising, for a plurality of storage compartments and for a plurality of vending transactions, data representing every transaction date, time, compartment from which merchandise is dispensed, quantity counter value, and payment type and account, wherein if the payment is in cash, the payment account has a null entry; if the payment is by a cellular mobile phone, the payment account is the phone number, and if the payment is a stored value card or credit card, the payment account is the account of the stored value card or credit card;

an alert information means for a plurality of storage compartments for composing an alert message if inventory in these compartments fall below one of the compartment margin, flavor margin or total margin;

a wireless modem means for communicating with the purchase if the purchaser initiates a purchase by keying in a sequence of predefined codes on a cellular mobile phone, for communicating with the central computer if the micro-computer detects that a predefined period of time has elapsed, or detects a sold out signal or the activation of a service signal, or a battery low signal, or an AC power being switched on or off, or an error condition, and for communicating with the central computer if the central computer initiates an inquiry; the predefined code comprising an agreed sequence of numbers that uniquely identifies the wireless purchase and the vending machine of which the purchase is to be performed; the predefined period of time means a period of time defined between two consecutive automatic communication of information or data with the central computer;

a power management circuit means for detecting and switching on and off the AC power supply and providing an alternative power supply if the AC power supply is switched off, for charging a battery when the AC power supply is switched on, and for providing power supply to the micro-controller and its peripherals for a period of time until the vending transaction has been communicated to the central computer.

As per Claim 47

The prior art of record, specifically, Martshitsch et al (6,764,003) in view of Kolls (6,056,194) further in view of Stapp (5,930,771), further in view of DeFosse (6,457,038) further in view of Etoh et al (5,963,452) does not disclose or fairly teach a system for conducting on-line inventory information acquisition and storage and automatic communication with a central computer for a plurality of vending machines comprising:

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providing a machine power up procedure in response to the switching on of an AC power supply to the vending machine, whereby the vending machine enters a normal mode and reports its identity to the central computer via the wireless modem and whereby, upon receiving the identity of the vending machine, the central computer searches in its database for the vending machine's last system status, returns the status information to the vending machine and records the on-line status of the vending machine in the central computer's database; the system status comprising the vending machine selection button-to storage mapping information; the storage compartment information comprising flavor, capacity, inventory and price, compartment margin, flavor margin, total margin, quantity counter value and periodic time elapsed;

providing a machine power down procedure in response to the switching off of the AC power supply to the vending machine, whereby the vending machine transmits to the central computer the system status and transaction information since the last reporting and enters into a sleep mode when the central computer receives and acknowledges the information, and whereby, upon receiving the power of status of the vending machine, the central computer updates the vending machine's entry in the central computer's database.

Prior Art Made of Record

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Simpson et al (6,478,187 discloses use of cell phone for vending machine purchases and vending machine inventory, but does not disclose short messages.

Kemp (WO 01/54087) discloses use of a cell phone to get merchandise from a vending machine with a central computer.

New BellSouth Technology... discloses vending machine inventory monitoring using short messages.

Mobile Devices and the Internet discloses using a cell phone and short messages to get drinks from a vending machine.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Dixon whose telephone number is (571) 272-6803. The examiner can normally be reached on Monday - Thursday 6:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on (571) 272-6812. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thomas A. Dixon
Primary Examiner
Art Unit 3639

May 05